



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/725,352

12/01/2003

Isabelle M. Rouvcllou

YOR920030519US1

1283

48355

7590

10/06/2006

MOSER, PATTERSON & SHERIDAN LLP
IBM CORPORATION
595 SHREWSBURY AVE
SUITE 100
SHREWSBURY, NJ 07702

EXAMINER

FERNANDEZ RIVAS, OMAR F

ART UNIT

PAPER NUMBER

2129

DATE MAILED: 10/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/725,352	Applicant(s) ROUVELLOU ET AL.	
	Examiner Omar F. Fernández Rivas	Art Unit 2129	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>11/4/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is in response to an AMENDMENT made by the Applicant entered on August 8, 2006.
2. The Office Action of May 5, 2006 is incorporated into this Final Office Action by reference.

Status of Claims

3. Claims 1, 17 and 24 have been amended. Claims 1-30 are pending on this application.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6, 17-22 and 24-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Abrari et al (US Patent #7,020,869, referred to as **Abrari**).

Claims 1,17 and 24

Abrari anticipates a method, a system and a computer readable media for authoring and executing an individualized language business rule (**Abrari**: abstract, C1, 19-32), comprising: creating at least one individualized language resource, said at least one individualized language resource being mapped onto at least one executable object

Art Unit: 2129

(**Abrari**: C4, L51-67, C5, L1-11; C7, L25-47; C12, L50-53; Figs. 3, 6 and 17; defining a name for an entity is creating an individualized language resource as interpreted from paragraphs 9, 60 and 61 of the Application's specification. It is inherent that any variable or statement created to produce a function in a computer will be mapped into an executable object that the computer can interpret upon compilation); creating at least one individualized language rule referencing at least one of said individualized language resource (**Abrari**: C4, L63-67, C5, L1-11; C7, L63-67; C8, L1-6; C12, L50-53; Figs. 3, 6 and 17; developing business rules using the vocabulary); and transforming said at least one individualized language rule into computer executable format (**Abrari**: C2, L23-65; C4, L34-67; C5, L1-42; C6, L19-38; in a computer system, all data must be transformed to computer executable format so that the computer can operate upon it).

Claims 2, 18 and 25

Abrari anticipates preventing a syntactically incorrect individualized language statement from being authored (**Abrari**: C10, L49-67; by checking and correcting the completeness (syntax) of a rule, syntactically incorrect rules will not be created).

Claims 3, 19 and 26

Abrari anticipates deploying said at least one transformed executable to a runtime environment and executing said at least one transformed individualized language rule (**Abrari**: C2, L23-65; C4, L34-39; the deployment platform used by the invention is a runtime environment).

Art Unit: 2129

Claims 4, 20 and 27

Abrari anticipates executing at least one non-individualized language rule (Abrari: C4, L51-62; C6, L39-51; Figs. 1 and 2; integrating rules with diverse application components (runtime environments) is executing a non-individualized language rule as understood from paragraph 55 of the Application's specifications).

Claims 5, 21 and 28

Abrari anticipates coordinating and cooperating by a runtime engine with other rules engines in a runtime environment (Abrari: C6, L20-51; Fig. 2; interacting with various business components).

Claims 6, 22 and 29

Abrari anticipates organizing said at least one individualized language resource and said at least one individualized language rule into at least one individualized language rule set (Abrari: C4, L51-65; Fig. 1).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7-16, 23 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abrari as set forth above in view of Serrano-Morales et al (US Patent #6,965,889, referred to as **Serrano**).

Claims 7, 23 and 30

Abrari does not teach creating at least one individualized rule template; and creating at least one individualized rule from said at least one individualized rule template.

Serrano teaches creating at least one individualized rule template (**Serrano**: abstract, L1-11, C3, L26-49); and creating at least one individualized rule from said at least one individualized rule template (**Serrano**: C4, L21-31).

It would have been obvious to one of ordinary skill in the arts at the time of the applicant's invention to modify the teachings of Abrari by creating at least one individualized rule template; and creating at least one individualized rule from said at least one individualized rule template as taught by Serrano for the purpose of making it easier for a user to provide the appropriate data needed to create a rule.

Claim 8

Abrari does not teach scoping authored templates and rules based upon rule set input and output groups.

Serrano teaches scoping authored templates and rules based upon rule set input and output groups (**Serrano**: C3, L35-67, C4, L1-12; determining rule elements that can be chosen by the user is scoping based on input and ruleflow is scoping based on output).

It would have been obvious to one of ordinary skill in the arts at the time of the applicant's invention to modify the teachings of Abrari by scoping authored templates and rules based upon rule set input and output groups as taught by Serrano for the

purpose of setting constraints on the rules that will be created.

Claim 9

Abrari teaches transforming said at least one of an individualized language resource, an individualized language rule, an individualized rule template, and individualized language rule set into a standardized format (**Abrari**: C6, L19-51; Fig. 2).

Claim 10

Abrari teaches at least one individualized language rule set influences at least one of application behavior and application state (**Abrari**: C8, L7-11; C20, L63-67, C21, L1-20; Fig. 6; executing an action when a condition is met influences an application's behavior and state).

Claim 11

Abrari teaches directly or indirectly linking an application to an execution of at least one individualized language rule set (**Abrari**: abstract; C8, L7-44; C20, L63-67, C21, L1-20; Fig. 6).

Claim 12

Abrari does not teach creating a type-safe linkage between an application and said at least one individualized language rule set.

Serrano teaches creating a type-safe linkage between an application and said at least one individualized language rule set (**Serrano**: C2, L15-28, C3, L35-67; Fig. 1A; the rule elements define the rule structure and the application applying the rule must use (are linked) these rule elements).

It would have been obvious to one of ordinary skill in the arts at the time of the applicant's invention to modify the teachings of Abrari by creating a type-safe linkage between an application and said at least one individualized language rule set as taught by Serrano for the purpose of providing the application with the correct data to apply a given rule.

Claim 13

Abrari teaches deploying said type-safe linkage in a runtime environment (**Abrari**: C4, L34-39; C10, L17-67; a computer system performs its operations in a runtime environment).

Claim 14

Abrari teaches finding, updating and deleting an item contained within said standardized format (**Abrari**: C6, L52-63; to modify (update or delete) a rule it must be found).

Claim 15

Abrari does not teach employing said type-safe linkage to select said at least one individualized rule set based on externalized criteria.

Serrano teaches employing said type-safe linkage to select said at least one individualized rule set based on externalized criteria (**Serrano**: C2, L15-28; C3, L55-67; C4, L5-12; selecting the rules based on the inputs given by the user).

It would have been obvious to one of ordinary skill in the arts at the time of the applicant's invention to modify the teachings of Abrari by employing said type-safe linkage to select said at least one individualized rule set based on externalized criteria

Art Unit: 2129

as taught by Serrano for the purpose of allowing the system to determine which rule can operate on a given input data.

Claim 16

Abrari does not teach transforming said type-safe linkage into a standardized format.

Serrano teaches transforming said type-safe linkage into a standardized format (Serrano: C4, L43-63).

It would have been obvious to one of ordinary skill in the arts at the time of the applicant's invention to modify the teachings of Abrari by transforming said type-safe linkage into a standardized format as taught by Serrano for the purpose of making the data types used by the rules compatible with different applications.

Response to Applicant's arguments

Rejection under 35 U.S.C. § 102

6. The Applicant's arguments regarding the Rejections under 35 U.S.C. § 102 have been fully considered but are not persuasive. The Applicant is reminded that it is the Examiner's duty to interpret each claim in the broadest reasonable manner.

In reference to Applicant's arguments:

The Examiner's attention is respectfully directed to the fact that Abrari fails to teach, show or suggest the novel invention of creating at least one individualized language resource (i.e., individualized vocabulary term), where the individualized

language resource is mapped onto at least one executable object, as positively claimed in the Applicants' amended independent claims 1, 17 and 24.

By contrast, Abrari provides only textual substitutions for entities and their attributes and relationships. For example, Abrari presents a vocabulary in the form of a tree of business terms, where non-leaf nodes comprise entities (e.g., "account"), leaf nodes comprise attributes of these entities (e.g., "account number") and branches comprise relationships between entities. Thus, Abrari provides vocabulary terms as elements of a conceptual semantic model. However, nowhere does Abrari teach, show or suggest mapping an executable object onto a vocabulary term, as claimed by the Applicants in independent claims 1, 17 and 24. As such, the Applicants submit that claims 1, 17 and 24 are not anticipated by the teachings of Abrari. Therefore, the Applicants submit claims 1, 17 and 24 fully satisfy the requirements of 35 U.S.C. §102 and are patentable thereunder.

Examiner's response:

When a computer is programmed to perform a function, all of the variables defined must be mapped into an executable object in computer language that the computer can interpret when the program is compiled. Therefore it is inherent in the system of Abrari that if a name for an entity is defined, at compilation time it will be mapped to an executable object interpretable by the computer. Therefore the rejection under 35 U.S.C. § 103 stands.

Rejection under 35 U.S.C. § 103

7. The Applicant's arguments regarding the Rejections under 35 U.S.C. § 102 have been fully considered but are not persuasive.

In reference to Applicant's arguments:

As discussed above, Abrari does not teach, show or suggest creating at least one individualized language resource (i.e., individualized vocabulary term), where the individualized language resource is mapped onto at least one executable object, as claimed by the Applicants in independent claims 1, 17 and 24. Serrano-Morales does not bridge this gap in the teachings of Abrari. Specifically, Serrano-Morales also does not teach, show or suggest mapping an individualized language resource or vocabulary term to an executable object. As such, the Applicants submit that claims 1, 17 and 24 are not made obvious by the teachings of Abrari in view of Serrano-Morales. Therefore, the Applicants submit claims 1, 17 and 24 fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder.

Examiner's response:

Claims 1, 17 and 24 are not rejected under 35 U.S.C. § 103, therefore the Applicant's argument is moot.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Correspondence Information

9. Any inquires concerning this communication or earlier communications from the examiner should be directed to Omar F. Fernández Rivas, who may be reached Monday through Friday, between 8:00 a.m. and 5:00 p.m. EST. or via telephone at (571) 272-2589 or email omar.fernandez_rivas@uspto.gov.

If you need to send an Official facsimile transmission, please send it to (571) 273-8300.

If attempts to reach the examiner are unsuccessful the Examiner's Supervisor, David Vincent, may be reached at (571) 272-3080.

Art Unit: 2129

Hand-delivered responses should be delivered to the Receptionist @ (Customer Service Window Randolph Building 401 Dulany Street Alexandria, VA 22313), located on the first floor of the south side of the Randolph Building.

Omar F. Fernández Rivas
Patent Examiner
Artificial Intelligence Art Unit 2129
United States Department of Commerce
Patent & Trademark Office

Friday, September 29, 2006

OF2


DAVID VINCENT
SUPERVISORY PATENT EXAMINER